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[FAD 13: Oils and Oilseeds]



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*Indian Standard*

**GRADING FOR  
NIGER SEEDS FOR OIL MILLING**

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**BUREAU OF INDIAN STANDARDS**  
**MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG**  
**NEW DELHI 110002**

# Indian Standard

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# *Indian Standard*

## GRADING FOR NIGER SEEDS FOR OIL MILLING

### 0. FOREWORD

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 18 September 1969, after the draft finalized by the Oils and Oilseeds Sectional Committee had been approved by the Chemical Division Council and the Agricultural and Food Products Division Council.

**0.2** Niger seed plant grows to some extent in many States in India and has attained considerable importance as an oilseed crop in Madhya Pradesh, Andhra Pradesh, Bihar, Orissa and Maharashtra. The niger seed is also known indigenously as *RAMTIL* and *SURGIYA*. The oil derived from the seeds is used principally for edible purposes.

**0.3** The oil obtained from niger seeds is covered in IS : 3490-1965\*.

**0.4** This standard contains clause 5.1 which calls for agreement between the purchaser and the supplier.

**0.5** For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960†. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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### 1. SCOPE

**1.1** This standard prescribes the methods of grading and requirements for the niger seeds for oil milling, along with the relevant methods of sampling and test.

### 2. TERMINOLOGY

**2.1** For the purpose of this standard definitions given under 2 of IS : 3579-1966‡ shall apply.

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\*Specification for niger seed oil.

†Rules for rounding off numerical values (*revised*).

‡Methods of test for oilseeds.



### 3. GRADES

3.1 The material shall be of two grades, namely, Grade 1 and Grade 2.

### 4. REQUIREMENTS

4.1 The material shall be derived from the plant *Guizotia abyssynica* Cass., fam. Compositae.

4.2 The material shall be clean and free from foreign matter, dirt and oilseeds other than niger seeds.

4.3 The seeds shall not emit any foul odour or found deformed due to moist conditions.

4.4 The niger seeds shall also be free from non-edible seeds, such as *MAHUA*, castor, *NEEM* and argemone.

4.5 The material shall also comply with the requirements given in Table 1.

**TABLE 1 REQUIREMENTS FOR NIGER SEEDS FOR MILLING**

Sl. No.	CHARACTERISTIC	REQUIREMENT FOR		METHOD OF TEST, REF TO CL No. IN IS: 3579-1966*
		Grade 1	Grade 2	
(1)	(2)	(3)	(4)	(5)
i)	Damaged and weevilled seeds, percent by weight, <i>Max</i>	1	3	4
ii)	Slightly damaged seeds, percent by weight, <i>Max</i>	2	6	
iii)	Shrivelled and immature seeds, percent by weight, <i>Max</i>	2	6	
iv)	Impurities, percent by weight, <i>Max</i>	1	3	—
v)	Total of (i) to (iv) above, <i>Max</i>	5	10	
vi)	Moisture content, percent by weight, <i>Max</i>	6	6	5.1
vii)	Oil content (on moisture free basis), percent by weight, <i>Min</i>	38	32	5.2
viii)	Acid value of extracted oil, <i>Max</i>	2	6	5.3

\*Methods of test for oilseeds.

## 5. PACKING

5.1 The material shall be supplied packed in clean, dry, sound, single, new or unmended hessian bags in merchantable condition as agreed to between the purchaser and the supplier.

## 6. MARKING

6.1 The bags shall be marked with the name, grade and weight of the material in the bag; and the year of the crop and the source of supply.

## 7. SAMPLING

7.1 Representative samples of the material shall be drawn as prescribed in IS: 4115-1967\*.

## 8. TESTS

8.1 Tests shall be carried out as prescribed in IS: 3579-1966†.

8.2 **Quality of Reagents** — Unless specified otherwise, pure chemicals and distilled water (*see* IS: 1070-1960‡) shall be used in the tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

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\*Methods for sampling of oilseeds.

†Methods of test for oilseeds.

‡Specification for water, distilled quality (*revised*).

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